In the Claims:

Add the following new claims:

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2. An apparatus for maintaining a set of network objects including:

a processor for controlling a cache mechanism configured to cache a plurality of objects including said set of network objects, said processor in communication with a network and configured to send at least one of said set of network objects over said network;

a mass storage, associated with said cache mechanism, in communication with said processor;

a memory, associated with said cache mechanism, in communication with said processor and said mass storage;

a hash mechanism, configured to locate any of said plurality of objects in said cache mechanism, responsive to an object identifier; and

an object storage mechanism, responsive to said hash mechanism, configured to transfer one or more of said plurality of objects between said memory and said mass storage.

3. The apparatus of claim 2, wherein said cache mechanism is organized into a plurality of blocks and the hash mechanism returns a block pointer to access any of said plurality of objects stored in said cache mechanism.

4.   The apparatus of claim 3, wherein said plurality of blocks of the mass storage are directly accessed independent of any filesystem imposed on the mass storage.

5.   The apparatus of claim 2, wherein the object storage mechanism further includes a delayed write means for performing an atomic write episode to write a plurality of blocks containing one or more of said plurality of objects to said mass storage.

6.   The apparatus of claim 3, wherein the object storage mechanism further includes an optimization means for minimizing the time required to transfer said plurality of blocks.

7.   The apparatus of claim 2, wherein the mass storage includes a plurality of disk drives and each of said plurality of disk drives is associated with a corresponding disk set descriptor object, each of said corresponding disk set descriptor objects referenced by a disk set object.

8.   The apparatus of claim 7, further including a dynamic mass storage configuration means for updating said disk set object and creating or modifying said corresponding disk set descriptor object responsive to the addition, removal, failure or replacement of one or more of said plurality of disk drives while said apparatus continues to operate.

9. A computer controlled method for maintaining a set of network objects including steps of:

    controlling a cache mechanism configured to cache a plurality of objects including said set of network objects;

    locating any of said plurality of objects in said cache mechanism, responsive to an object identifier;

    atomically transferring, responsive the step of locating, one or more of said plurality of objects between a memory and a mass storage; and

    sending at least one of said set of network objects over said network.

10. The computer controlled method of claim 9, wherein said cache mechanism is organized into a plurality of blocks and a hash mechanism performs the step of returning a block pointer to access any of said plurality of objects stored in said cache mechanism.

11. The computer controlled method of claim 9, wherein the method further includes the step of performing an atomic write episode to write a plurality of blocks containing one or more of said plurality of objects to said mass storage.

12. The apparatus of claim 9, further including the step of minimizing the time required to transfer said plurality of blocks.